

REMARKS

Applicants respectfully request further examination and reconsideration in view of the arguments set forth fully below. In the Final Office Action dated June 10, 2009, claims 42-55 and 57-67 have been rejected. In response, the Applicants have submitted the following remarks. Accordingly, claims 42-55 and 57-67 are still pending. Favorable reconsideration is respectfully requested in view of the arguments set forth fully below.

Examiner Interview Summary

On August 7, 2009, the undersigned and Examiner Rebecca Slomski conducted a brief telephonic interview regarding this matter. During the interview, the undersigned clarified arguments made on behalf of Applicants in the undersigned's interview agenda, as well as in previous Office Action responses. Furthermore, the undersigned explained the differences between the holographic system in Topcon and the DOE system of the present application. Specifically, the undersigned clarified that the DOE includes an array of cells, each cell transforming the phase of the beam of light so that a pattern beam of light is reconstructed at a particular position in space. Support for this clarification is made in the specification of the present application, page 2, lines 27-33. While no specific agreement was reached during the telephonic interview, the Applicants are hereby preparing this after final response to invoke an Advisory Action without claim amendments, as Applicants believe that the independent claims 42-57 and 60 are all allowable over the cited references without amendment.

Rejections Under 35 U.S.C. §103

Claims 42-55 and 57 have been rejected under 35 U.S.C. §103(9) as being unpatentable over by EP Application No. 1291199 to Topcon (hereinafter Topcon). The Applicants respectfully disagree with this rejection.

As discussed again in the interview, Topcon teaches projecting a measuring beam of light from a predetermined direction onto a hologram formed on a predetermined position on a card. As further explained during the interview, holograms are designed by optimizing two interfering wave fronts with the hologram being the interference produced by two point sources whose locations in space are clearly defined. It is of the utmost importance to

understand that the optical interference pattern produced when a hologram is reconstructed does not produce a patterned beam of selected design. Accordingly, Topcon does not teach a diffractive optical projection element which transforms a beam of light into a patterned beam of light that is reconstructed at a particular position in space to form a projected image. Following this reasoning, Topcon then cannot teach an optical detection device utilized to reconstruct the patterned beam of light to form the projected image.

In contrast to the teachings of Topcon, the DOE of the present application transforms a beam of light into a patterned beam of light. As discussed in the Examiner interview and further outlined in the interview summary, the DOE includes an array of cells, each cell transforming the phase of the beam of light so that a pattern beam of light is reconstructed at a particular position in space. The Topcon reference, including a reflective holographic application, does not teach nor make obvious such a DOE application provided in a substantially transparent or translucent portion or window in a security document as described and claimed in the present application.

The independent claim 42 is directed to an apparatus for inspection of at least one security article incorporating a diffractive optical projection element as a security device, the diffractive optical projection element being provided in a substantially transparent or translucent portion or window in the security document, wherein the apparatus comprises a light source for directing a beam of light onto said diffractive optical projection element in said transparent or translucent portion or window, wherein the diffractive optical projection element transforms the beam into a patterned beam of light that is reconstructed at a particular position in space to form a projected image; and at least one optical detection device located at the position at which the patterned beam of light is reconstructed to form the projected image. As discussed above, Topcon does not teach nor make obvious a DOE including an array of cells, each cell transforming the phase of the beam of light so that a pattern beam of light is reconstructed at a particular position in space. Accordingly, the independent claim 42 is allowable over the teachings of Topcon.

The independent claim 57 includes elements similar to those discussed and claimed in the independent claim 42. Accordingly, the Applicants respectfully submit that the

independent claim 57 is allowable over the teachings of Topcon for the same reasons as discussed above with respect to the independent claim 42.

Claims 43-55 are dependent upon the independent claim 42. As discussed above, the independent claim 42 is allowable over the teachings of Topcon. Accordingly, claims 43-55 are also allowable as being dependent upon an allowable base claim.

Claims 58-63 and 66-67 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Topcon in view of U.S. Patent Publication No. 2002/0154290 to Tompkin et al (hereinafter Tompkin). The Applicants respectfully disagree with this rejection.

Claims 58 and 59 are dependent upon the independent claim 57. As discussed above, the independent claim 57 is allowable over the teachings of Topcon. Accordingly, claims 58 and 59 are also allowable as being dependent upon an allowable base claim.

With respect to claim 60, the Examiner agreed during the interview that the "window locator" of the present application is quite different from the edge detector as disclosed in the Tompkin. Tompkin specifically relates to coins provided with diffraction structures, and because coins are by their very nature opaque, there is no teaching or suggestion of providing a transparent portion or window in a coin. Further, the description in the specification of the present application on page 9, line 8: "by means of a time gated output from the processor 34" clearly differentiates from how an edge detector may operate. Accordingly, the Applicants respectfully submit that the independent claim 60 is allowable over the teachings of Topcon, Tompkin and their combination.

Claims 61-63 and 66-67 are dependent upon the independent claim 60. As discussed above, the independent claim 60 is allowable over the teachings of Topcon, Tompkin and their combination. Accordingly, claims 61-63 and 66-67 are also allowable as being dependent upon an allowable base claim.

Claims 64-65 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Topcon, in view of Tompkin, and further in view of U.S. Patent No. 6,111,953 to Walker et al (hereinafter Walker). Claims 64-65 are dependent upon the independent claim 60. As discussed above, the independent claim 60 is allowable over the teachings of Topcon and

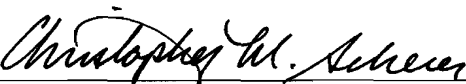
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Tompkin. Accordingly, claims 64-65 are also allowable as being dependent upon an allowable base claim.

Applicants respectfully submit that all the claims are now in condition for allowance and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (414)271-7590 to discuss the say so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,

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